



U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / PUBLIC HEALTH SERVICE HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

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EPIDEMIOLOGIC NOTES AND REPORTS  
MEASLES OUTBREAK - Chicago

From Sept. 1 to Nov. 21, 1969, a total of 163 cases of measles including two deaths were reported to the Chicago Board of Health. This represents a marked increase in measles incidence over the number of cases (25) reported during the comparable period in 1968.

Early epidemiologic investigation showed that approximately 75 percent of the reported cases were in preschool-age children. Most of the reported cases have been concentrated in the urban, hard-core poverty areas of the south and west sides of Chicago.

Interviews with administrators of outpatient clinics and hospitals have revealed underreporting of cases. Individual case investigations are being carried out to help direct an immunization campaign.

## CONTENTS

Epidemiologic Notes and Reports	
Measles Outbreak - Chicago	409
Measles Respiratory Disease - Anchorage, Alaska	410
Summary of Reported Cases of Infectious Syphilis	410
Surveillance Summary	
Meningococcal Infections - United States	
Epidemiologic Year 1969	411

(Reported by Jack Zackler, M.D., Acting Commissioner of Health, and Herbert Slutsky, Ph.D., Senior Epidemiologist, Chicago Board of Health; Norman Rose, M.D., Chief, Bureau of Epidemiology, Illinois Department of Public Health; and two EIS Officers.)

TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	47th WEEK ENDED		MEDIAN 1964 - 1968	CUMULATIVE, FIRST 47 WEEKS		
	November 22, 1969	November 23, 1968		1969	1968	MEDIAN 1964 - 1968
Aseptic meningitis	64	81	48	3,232	4,056	2,730
Brucellosis	5	8	5	211	207	226
Diphtheria	9	10	10	176	219	184
Encephalitis, primary:						
Arthropod-borne & unspecified	24	32	30	1,183	1,308	1,745
Encephalitis, post-infectious	2	7	7	276	439	666
Hepatitis, serum	100	151	724	4,803	4,189	34,395
Hepatitis, infectious	1,106	1,175		43,302	41,343	
Malaria	80	39	12	2,826	2,147	441
Measles (rubeola)	338	251	950	22,482	21,306	196,513
Meningococcal infections, total	46	48	48	2,671	2,318	2,518
Civilian	45	42	---	2,459	2,121	---
Military	1	6	---	212	197	---
Mumps	1,821	2,060	---	78,805	138,173	---
Polio myelitis, total	---	1	2	16	57	57
Paralytic	---	1	1	15	57	57
Rubella (German measles)	491	295	---	52,706	46,700	---
Streptococcal sore throat & scarlet fever	9,794	11,037	7,513	380,390	383,505	377,983
Tetanus	1	1	5	145	152	203
Tularemia	6	5	2	134	165	165
Typhoid fever	13	11	7	304	365	378
Typhus, tick-borne (Rky. Mt. spotted fever)	8	3	2	445	273	258
Rabies in animals	48	51	55	3,020	3,089	3,870

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	3	Rabies in man:	1
Botulism:	12	Rubella congenital syndrome: * Tenn.-1	15
Leptospirosis: Fla.-5, La.-1	80	Trichinosis:	170
Plague:	5	Typhus, murine:	47
Psittacosis: Ohio-1	41		

\*Delayed reports: Rubella cong. synd. La.-1

## FEBRILE RESPIRATORY ILLNESS - Anchorage, Alaska

In November 1969, an outbreak of acute respiratory disease with 29 cases occurred among the staff and children at a home in Anchorage, Alaska, for children with behavioral disorders. The 38 children at the home range in age from 6 to 18 years and reside in one of four cottages. Several staff members also reside in each cottage; additional staff work during the day in an administration building. The children attend local public schools.

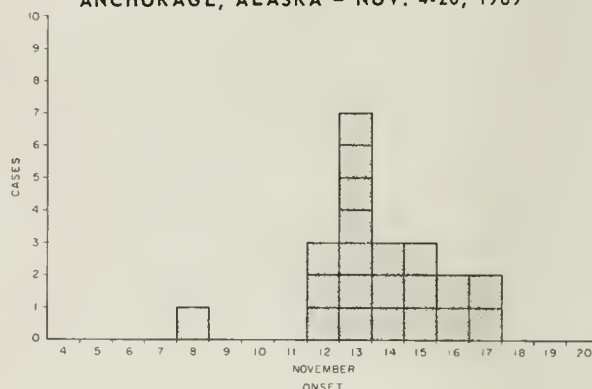
Of the 29 patients, 21 had fever of greater than 101°F., and they form the basis of the following analysis. The index case, a 9-year-old boy, had onset of influenza-like illness on November 8; the other 20 febrile cases occurred between November 12 and 17 (Figure 1). Symptoms in the febrile patients included cough (100 percent), malaise (90 percent), sore throat (86 percent), prostration (76 percent), rhinitis (76 percent), nausea (57 percent), myalgia (33 percent), vomiting (usually one episode, often post-tussive - 33 percent), and epistaxis (29 percent). Two patients had pneumonia. Onset of illness was gradual in 12 cases and abrupt in five; the type of onset was uncertain in four.

Throat swabs and serum samples were collected from all cases on November 19 and 20. Laboratory results are pending.

Epidemiologic investigation is continuing.

(Reported by Donald K. Freedman, M.D., Director, Division of Public Health, Alaska Department of Health and Welfare; David R.L. Duncan, M.D., Health Officer, Greater

Figure 1  
ACUTE RESPIRATORY ILLNESS  
ANCHORAGE, ALASKA - NOV. 4-20, 1969



Anchorage Area Borough; the Virology Laboratory and Epidemiology Section, Arctic Health Research Center, Ecological Investigations Program, NCDC, Anchorage; and an EIS Officer.)

## Editorial Comment:

Although the causative organism of these illnesses is not yet established and may ultimately prove not to be influenza, this is the first report of an influenza-like illness received from the United States this fall and winter.

## SUMMARY OF REPORTED CASES OF INFECTIOUS SYPHILIS

CASES OF PRIMARY AND SECONDARY SYPHILIS: By Reporting Areas October 1968 and October 1969 - Provisional Data

Reporting Area	October		Cumulative Jan. - Oct.		Reporting Area	October		Cumulative Jan. - Oct.	
	1969	1968	1969	1968		1969	1968	1969	1968
NEW ENGLAND.....	28	29	312	288	EAST SOUTH CENTRAL.....	73	89	822	1,138
Maine.....	1	-	8	3	Kentucky.....	13	11	135	101
New Hampshire.....	1	4	8	6	Tennessee.....	24	17	263	267
Vermont.....	-	-	1	-	Alabama.....	16	33	213	477
Massachusetts.....	10	22	177	185	Mississippi.....	20	28	211	293
Rhode Island.....	5	-	36	26	WEST SOUTH CENTRAL.....	324	325	3,039	2,931
Connecticut.....	11	3	82	68	Arkansas.....	25	5	186	106
MIDDLE ATLANTIC.....	351	368	3,240	2,882	Louisiana.....	69	74	596	716
Upstate New York.....	18	56	224	269	Oklahoma.....	14	10	71	68
New York City.....	226	252	2,214	1,844	Texas.....	216	236	2,186	2,041
Pa. (Excl. Phila.).....	15	13	121	189	MOUNTAIN.....	57	36	537	406
Philadelphia.....	18	16	180	205	Montana.....	-	-	8	7
New Jersey.....	74	31	501	375	Idaho.....	1	-	9	2
EAST NORTH CENTRAL.....	290	260	2,241	2,397	Wyoming.....	-	2	5	4
Ohio.....	54	36	336	383	Colorado.....	6	2	41	17
Indiana.....	48	34	320	294	New Mexico.....	20	10	227	132
Downstate Illinois.....	28	36	224	178	Arizona.....	21	20	177	201
Chicago.....	106	88	799	841	Utah.....	2	-	15	8
Michigan.....	51	65	541	677	Nevada.....	7	2	55	35
Wisconsin.....	3	1	21	24	PACIFIC.....	211	210	1,712	1,479
WEST NORTH CENTRAL.....	44	41	321	325	Washington.....	10	4	54	39
Minnesota.....	6	6	45	44	Oregon.....	4	9	37	39
Iowa.....	5	6	35	37	California.....	196	197	1,610	1,394
Missouri.....	16	20	142	164	Alaska.....	-	-	6	2
North Dakota.....	1	-	11	5	Hawaii.....	1	-	5	5
South Dakota.....	5	-	20	30	U. S. TOTAL.....	1,838	1,760	16,336	16,142
Nebraska.....	5	3	29	18	TERRITORIES.....	85	107	979	957
Kansas.....	6	6	39	27	Puerto Rico.....	82	100	965	910
SOUTH ATLANTIC.....	460	402	4,112	4,296	Virgin Islands.....	3	7	14	47
Oklahoma.....	4	5	37	32	Note: Cumulative Totals include revised and delayed reports through previous months.				
Maryland.....	39	36	355	388					
District of Columbia.....	56	61	488	512					
Virginia.....	33	25	256	258					
West Virginia.....	-	1	15	28					
North Carolina.....	62	28	433	492					
South Carolina.....	41	48	478	443					
Georgia.....	90	87	875	760					
Florida.....	135	111	1,175	1,383					

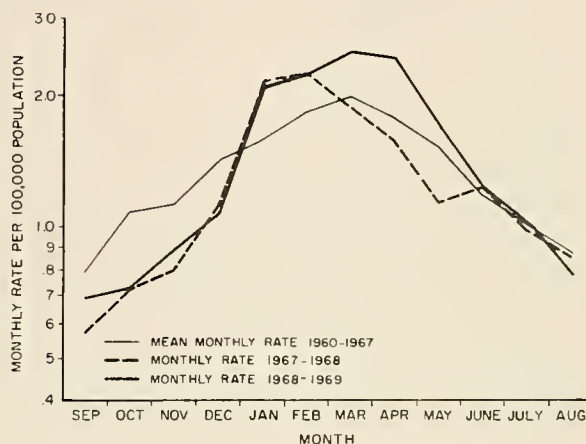
**SURVEILLANCE SUMMARY**  
**MENINGOCOCCAL INFECTIONS – United States Epidemiological Year 1969\***

For the epidemiologic year (EY) 1969 (Sept. 1, 1968 – Aug. 31, 1969), a total of 2,870 cases of meningococcal infection were reported to the NCDC. The monthly incidence rates were similar to those in previous years with the highest rates in the late winter or early spring months (Figure 2). The monthly rates for March, April, and May of 1969 were higher than the mean monthly rates for these months during the 8-year period from 1960-1967, and also exceeded the rates for March, April, and May of 1968. However, the peak monthly rates for EY 1969 were still lower than those for corresponding months during 1966, the year of greatest overall incidence of meningococcal infection since 1960.

As in previous years, the number of cases reported in military personnel (243) remained about 10 percent of the number reported in civilians (2,627). The monthly number of cases reported in military personnel paralleled the seasonal variations in civilian incidence.

In EY 1969, 55 percent of the isolates submitted to the NCDC for serogrouping and sulfadiazine sensitivity test-

**Figure 2**  
**MENINGOCOCCAL INFECTIONS – UNITED STATES**  
**MEAN MONTHLY RATES 1960-1967**  
**MONTHLY RATES 1967-1968 AND 1968-1969**



**Table 1**  
**Meningococcal Isolates That Were Inhibited at or Below 1.0 mg per 100 ml Sulfadiazine**

Interval	Total		Group B		Group C		All Others	
	Number Strains Tested	Percent Inhibited	Number Strains Tested	Percent Inhibited	Number Strains Tested	Percent Inhibited	Number Strains Tested	Percent Inhibited
Jan. 1966 through Dec. 1966	754	59.3	537	52.4	92	84.9	125	70.4
Jan. 1967 through Dec. 1967	317	56.2	209	49.3	61	62.3	47	78.7
Jan. 1968 through Aug. 1968	426	50.7	192	60.4	164	25.6	70	82.6
Sept. 1968 through Aug. 1969	414	35.3	161	62.1	227	10.6	26	84.6

\*Isolates submitted from cases.

**Table 2**  
**Percentage of Meningococcal Cases (1966-1969) and Submitted Isolates (1968-1969)**  
**by U.S. Geographic Divisions**

Division	Percent of Reported Cases				Percent of Submitted Isolates
	1966	1967	Jan.-Aug. 1968	Sept. 1968 – Aug. 1969	Sept. 1968 – Aug. 1969
New England	5	4	6	4	7
Middle Atlantic	13	18	18	16	28
East North Central	16	14	12	14	8
West North Central	5	5	5	5	3
South Atlantic	18	20	20	18	16
East South Central	9	9	9	7	5
West South Central	13	11	15	13	19
Mountain	3	2	2	2	3
Pacific	19	17	13	21	10
	100	100	100	100	100
Total U.S. Cases	(3,381)	(2,161)	(1,976)	(2,870)	Total Isolates Submitted (414)

\*Only includes isolates from blood, cerebrospinal fluid, conjunctiva, or joints.

(Continued on page 416)



TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

NOVEMBER 22, 1969 AND NOVEMBER 23, 1968 (47th WEEK)

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	DIPHTHERIA	ENCEPHALITIS			HEPATITIS			MALARIA	
				Primary including unsp. cases		Post- Infectious	Serum	Infectious			
				1969	1968	1969	1969	1968	1969	1969	1968
UNITED STATES...	64	5	9	24	32	2	100	1,106	1,175	80	2,826
NEW ENGLAND.....	5	-	-	4	-	-	3	124	58	1	92
Maine.....	-	-	-	-	-	-	-	12	2	-	7
New Hampshire.....	-	-	-	1	-	-	-	8	-	-	2
Vermont.....	-	-	-	-	-	-	1	5	1	-	-
Massachusetts.....	-	-	-	2	-	-	1	62	22	1	57
Rhode Island.....	5	-	-	-	-	-	-	23	9	-	10
Connecticut.....	-	-	-	1	-	-	1	14	24	-	16
MIDDLE ATLANTIC.....	10	1	-	5	4	1	42	210	236	9	331
New York City.....	2	-	-	-	1	-	27	40	113	-	22
New York, up-State.....	4	-	-	2	2	-	4	40	49	5	74
New Jersey.....	-	-	-	3	1	-	10	53	46	4	130
Pennsylvania.*.....	4	1	-	-	-	1	1	77	28	-	105
EAST NORTH CENTRAL...	16	-	-	4	13	-	11	201	165	8	285
Ohio.....	6	-	-	1	9	-	3	75	36	-	25
Indiana.....	-	-	-	-	-	-	-	11	11	1	26
Illinois.....	2	-	-	-	-	-	1	43	55	-	170
Michigan.....	6	-	-	1	3	-	7	65	51	7	63
Wisconsin.....	2	-	-	2	1	-	-	7	12	-	1
WEST NORTH CENTRAL...	1	2	-	-	2	-	2	28	81	6	197
Minnesota.*.....	-	1	-	-	1	-	-	3	30	-	14
Iowa.*.....	1	1	-	-	1	-	-	6	4	-	21
Missouri.....	-	-	-	-	-	-	1	11	14	-	42
North Dakota.....	-	-	-	-	-	-	-	-	-	-	3
South Dakota.....	-	-	-	-	-	-	-	1	16	-	1
Nebraska.....	-	-	-	-	-	-	-	-	1	-	4
Kansas.....	-	-	-	-	-	-	1	7	16	6	112
SOUTH ATLANTIC.....	11	1	4	5	2	-	5	108	143	19	729
Delaware.....	-	-	-	-	-	-	-	1	-	-	4
Maryland.....	4	-	-	1	1	-	-	11	23	-	33
Dist. of Columbia..	-	-	-	-	-	-	1	-	3	-	2
Virginia.....	-	1	-	1	-	-	-	9	11	1	27
West Virginia.....	-	-	-	-	-	-	-	4	3	3	3
North Carolina.....	3	-	-	-	-	-	-	24	2	-	285
South Carolina.....	-	-	-	-	-	-	-	5	8	4	62
Georgia.....	-	-	-	-	1	-	-	22	34	2	264
Florida.....	4	-	4	3	-	-	4	32	59	9	49
EAST SOUTH CENTRAL...	9	-	2	1	3	1	-	81	71	23	158
Kentucky.*.....	3	-	-	-	-	1	-	37	36	21	129
Tennessee.....	1	-	-	1	3	-	-	32	23	-	-
Alabama.....	5	-	-	-	-	-	-	7	4	2	25
Mississippi.....	-	-	2	-	-	-	-	5	8	-	4
WEST SOUTH CENTRAL...	2	1	2	3	3	-	2	48	67	2	234
Arkansas.....	-	-	-	-	-	-	-	-	6	-	13
Louisiana.....	1	-	2	1	1	-	2	10	20	1	46
Oklahoma.*.....	-	1	-	2	1	-	-	4	7	1	74
Texas.*.....	1	-	-	-	1	-	-	34	34	-	101
MOUNTAIN.....	2	-	-	1	1	-	1	45	62	-	137
Montana.....	-	-	-	-	-	-	-	2	7	-	3
Idaho.....	-	-	-	-	-	-	-	1	9	-	5
Wyoming.....	-	-	-	-	-	-	-	6	1	-	-
Colorado.*.....	2	-	-	-	1	-	1	17	30	-	112
New Mexico.....	-	-	-	1	-	-	-	11	7	-	9
Arizona.....	-	-	-	-	-	-	-	8	6	-	1
Utah.....	-	-	-	-	-	-	-	-	2	-	1
Nevada.....	-	-	-	-	-	-	-	-	-	-	6
PACIFIC.....	8	-	1	1	4	-	34	261	292	12	663
Washington.....	-	-	1	-	1	-	-	31	46	2	7
Oregon.....	-	-	-	-	-	-	5	20	24	-	16
California.....	8	-	-	1	3	-	29	199	221	10	516
Alaska.*.....	-	-	-	-	-	-	-	1	1	-	3
Hawaii.....	-	-	-	-	-	-	-	10	-	-	121
Puerto Rico.*.....	-	-	-	-	-	-	-	10	23	-	4

\*Delayed reports: Aseptic meningitis: Minn. 22

Diphtheria: Tex. delete 1, Colo. 1

Encephalitis, post-infections: Pa. delete 1

Hepatitis, serum: Ky. 1

Hepatitis, infectious: Okla. 1, Alaska 3, P.R. 1

Malaria: Iowa 1, Okla. 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

NOVEMBER 22, 1969 AND NOVEMBER 23, 1968 (47th WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS	POLIOMYELITIS			RUBELLA	
	1969	Cumulative		1969	Cumulative			1969	Total	Paralytic		
		1969	1968		1969	1968			1969	1969		Cum. 1969
UNITED STATES...	338	22,482	21,306	46	2,671	2,318	1,821	-	-	15	491	
NEW ENGLAND.....	16	1,168	1,216	1	106	135	195	-	-	2	25	
Maine.....	-	9	38	-	7	6	42	-	-	1	1	
New Hampshire.....	1	244	141	-	4	8	2	-	-	-	1	
Vermont.....	-	3	2	-	-	1	27	-	-	-	-	
Massachusetts.....	8	243	373	-	41	71	41	-	-	-	7	
Rhode Island.....	-	27	23	-	14	9	27	-	-	-	9	
Connecticut.....	7	642	639	1	40	40	56	-	-	1	7	
MIDDLE ATLANTIC.....	83	7,767	4,489	7	444	416	156	-	-	2	29	
New York City.....	14	4,994	2,315	-	85	86	67	-	-	-	4	
New York, Up-State.....	5	615	1,340	3	86	72	NN	-	-	1	10	
New Jersey.....	40	1,018	673	2	171	142	89	-	-	-	5	
Pennsylvania.....	24	1,140	161	2	102	116	NN	-	-	1	10	
EAST NORTH CENTRAL...	61	2,635	4,047	8	366	287	688	-	-	1	127	
Ohio.....	18	480	315	1	134	81	54	-	-	-	11	
Indiana.....	2	478	704	2	48	39	68	-	-	-	16	
Illinois.....	25	686	1,404	1	52	63	187	-	-	1	8	
Michigan.....	9	352	313	4	105	84	193	-	-	-	56	
Wisconsin.....	7	639	1,311	-	27	20	186	-	-	-	36	
WEST NORTH CENTRAL...	87	967	407	1	131	126	63	-	-	1	37	
Minnesota.....	-	17	18	-	29	29	-	-	-	-	3	
Iowa.....	1	337	108	1	20	10	44	-	-	-	20	
Missouri.....	-	31	81	-	53	41	-	-	-	-	1	
North Dakota.....	1	44	138	-	2	4	7	-	-	-	4	
South Dakota.....	-	3	4	-	1	5	NN	-	-	-	-	
Nebraska.....	84	527	48	-	10	9	3	-	-	-	2	
Kansas.....	1	8	10	-	16	28	9	-	-	1	7	
SOUTH ATLANTIC.....	15	2,669	1,672	1	467	463	109	-	-	1	45	
Delaware.....	2	403	17	-	13	9	2	-	-	-	-	
Maryland.....	1	81	103	-	41	40	7	-	-	-	1	
Dist. of Columbia*.....	1	32	6	-	9	17	3	-	-	-	1	
Virginia.....	5	912	381	-	57	44	27	-	-	-	19	
West Virginia.....	1	221	312	-	24	13	58	-	-	-	10	
North Carolina.....	4	330	292	-	87	91	NN	-	-	-	3	
South Carolina.....	1	132	21	-	59	61	4	-	-	-	-	
Georgia.....	-	2	4	-	77	90	-	-	-	-	-	
Florida.....	-	556	536	1	100	98	8	-	-	1	11	
EAST SOUTH CENTRAL...	2	118	503	3	171	208	63	-	-	1	21	
Kentucky.....	2	68	103	-	55	94	19	-	-	-	1	
Tennessee.....	-	20	64	1	70	63	41	-	-	-	19	
Alabama.....	-	6	95	2	27	27	3	-	-	1	1	
Mississippi.....	-	24	241	-	19	24	-	-	-	-	-	
WEST SOUTH CENTRAL...	49	4,931	5,130	9	354	331	119	-	-	6	64	
Arkansas.....	-	16	2	-	32	20	-	-	-	-	-	
Louisiana*.....	-	125	25	4	97	94	1	-	-	-	-	
Oklahoma.....	-	142	128	2	36	53	35	-	-	-	13	
Texas.....	49	4,648	4,975	3	189	164	83	-	-	6	51	
MOUNTAIN.....	16	1,072	1,056	4	56	41	121	-	-	-	35	
Montana*.....	-	92	58	-	8	6	6	-	-	-	3	
Idaho.....	-	90	21	2	13	11	9	-	-	-	4	
Wyoming.....	-	-	54	-	-	3	-	-	-	-	1	
Colorado.....	-	141	520	1	10	12	41	-	-	-	1	
New Mexico.....	4	279	143	1	8	1	20	-	-	-	8	
Arizona.....	12	458	233	-	10	4	21	-	-	-	15	
Utah.....	-	11	21	-	5	1	24	-	-	-	3	
Nevada.....	-	1	6	-	2	3	-	-	-	-	-	
PACIFIC.....	9	1,155	2,786	12	576	311	307	-	-	1	108	
Washington.....	-	67	583	-	57	47	106	-	-	-	28	
Oregon.....	-	200	572	-	20	25	21	-	-	-	7	
California.....	9	830	1,585	12	478	222	158	-	-	1	51	
Alaska*.....	-	13	11	-	11	3	22	-	-	-	21	
Hawaii.....	-	45	35	-	10	14	-	-	-	-	1	
Puerto Rico.....	108	1,892	485	-	19	20	19	-	-	-	-	

\*Delayed reports: Measles: D.C. 3

Mumps: Alaska 18

Rubella: La. delete 1, Mont. delete 1, Alaska 3

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
NOVEMBER 22, 1969 AND NOVEMBER 23, 1968 (47th WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969
UNITED STATES...	9,794	1	145	6	134	13	304	8	445	48	3,020
NEW ENGLAND.....	1,180	-	1	-	16	1	16	-	1	4	53
Maine.....	19	-	-	-	-	-	1	-	-	-	6
New Hampshire.....	12	-	-	-	-	-	-	-	-	-	5
Vermont.....	2	-	-	-	16	-	-	-	-	4	31
Massachusetts.....	154	-	1	-	-	-	8	-	1	-	3
Rhode Island.....	85	-	-	-	-	-	1	-	-	-	-
Connecticut.....	908	-	-	-	-	1	6	-	-	-	8
MIDDLE ATLANTIC.....	404	1	19	-	5	-	31	-	46	10	222
New York City.....	16	1	11	-	1	-	17	-	-	-	-
New York, Up-State.....	314	-	3	-	4	-	6	-	7	10	208
New Jersey.....	NN	-	3	-	-	-	3	-	15	-	-
Pennsylvania.....	74	-	2	-	-	-	5	-	24	-	14
EAST NORTH CENTRAL...	722	-	19	1	16	3	35	-	3	3	219
Ohio.....	61	-	4	-	-	1	12	-	-	-	72
Indiana.....	176	-	-	1	5	-	-	-	-	1	53
Illinois.....	126	-	10	-	4	1	16	-	3	1	37
Michigan.....	256	-	5	-	-	1	6	-	-	1	8
Wisconsin.....	103	-	-	-	7	-	1	-	-	-	49
WEST NORTH CENTRAL...	354	-	11	-	14	-	10	-	8	9	568
Minnesota.....	16	-	3	-	-	-	4	-	-	5	153
Iowa.....	158	-	-	-	-	-	1	-	7	1	89
Missouri.....	11	-	4	-	10	-	3	-	-	1	133
North Dakota.....	122	-	-	-	-	-	-	-	-	-	69
South Dakota.....	22	-	-	-	-	-	-	-	1	-	43
Nebraska.....	6	-	-	-	1	-	1	-	-	1	14
Kansas.....	19	-	4	-	3	-	1	-	-	1	67
SOUTH ATLANTIC.....	926	-	28	1	23	1	47	5	251	10	714
Delaware.....	4	-	-	1	1	-	2	-	3	-	-
Maryland.....	66	-	1	-	-	-	4	-	48	-	3
Dist. of Columbia..	10	-	2	-	-	-	2	-	-	-	-
Virginia.....	264	-	1	-	4	-	1	-	81	-	351
West Virginia*.....	271	-	1	-	2	-	2	-	5	1	103
North Carolina.....	NN	-	3	-	6	-	9	2	66	-	5
South Carolina.....	144	-	1	-	2	-	1	2	32	-	-
Georgia.....	14	-	7	-	4	-	11	-	15	4	87
Florida.....	153	-	12	-	4	1	15	1	1	5	165
EAST SOUTH CENTRAL...	1,490	-	22	-	14	1	46	2	65	3	383
Kentucky.....	186	-	7	-	-	-	8	-	13	1	196
Tennessee.....	921	-	4	-	13	1	20	2	43	2	129
Alabama.....	179	-	6	-	-	-	4	-	6	-	52
Mississippi.....	204	-	5	-	1	-	14	-	3	-	6
WEST SOUTH CENTRAL...	965	-	27	2	23	3	32	1	49	7	437
Arkansas.....	39	-	2	2	5	-	13	-	7	-	30
Louisiana.....	4	-	7	-	4	-	3	-	-	1	37
Oklahoma.....	61	-	1	-	8	-	-	1	30	1	67
Texas.....	861	-	17	-	6	3	16	-	12	5	303
MOUNTAIN.....	2,589	-	6	1	18	1	29	-	17	-	118
Montana.....	59	-	1	-	-	-	2	-	-	-	-
Idaho.....	221	-	-	-	-	-	4	-	6	-	-
Wyoming.....	585	-	-	-	4	-	5	-	-	-	55
Colorado.....	1,071	-	2	-	-	-	3	-	9	-	3
New Mexico.....	407	-	-	-	1	1	8	-	-	-	17
Arizona.....	84	-	3	-	-	-	6	-	-	-	22
Utah.....	162	-	-	1	13	-	-	-	2	-	5
Nevada.....	-	-	-	-	-	-	1	-	-	-	16
PACIFIC.....	1,164	-	12	1	5	3	58	-	5	2	306
Washington.....	919	-	1	-	2	-	2	-	3	-	4
Oregon.....	143	-	-	-	1	-	6	-	-	-	4
California.....	---	-	11	1	2	1	44	-	2	2	298
Alaska*.....	31	-	-	-	-	-	-	-	-	-	-
Hawaii.....	71	-	-	-	-	2	6	-	-	-	-
Puerto Rico.....	-	-	12	-	-	-	7	-	-	-	28

\*Delayed reports: SST: W. Va. delete 41, Alaska 74

Week No. TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED NOVEMBER 22, 1969

47

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes	Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over				All Ages	65 years and over		
NEW ENGLAND:	740	435	48	31	SOUTH ATLANTIC:	1,375	749	62	61
Boston, Mass.-----	236	115	11	8	Atlanta, Ga.-----	140	67	5	10
Bridgeport, Conn.-----	50	35	4	3	Baltimore, Md.-----	266	140	7	12
Cambridge, Mass.-----	26	14	9	—	Charlotte, N. C.-----	58	28	1	3
Fall River, Mass.-----	34	21	2	—	Jacksonville, Fla.-----	97	50	1	3
Hartford, Conn.-----	49	31	2	7	Miami, Fla.-----	158	94	7	3
Lowell, Mass.-----	21	14	3	2	Norfolk, Va.-----	68	30	7	3
Lynn, Mass.-----	26	17	1	1	Richmond, Va.-----	82	46	5	2
New Bedford, Mass.-----	30	25	1	—	Savannah, Ga.-----	38	26	2	1
New Haven, Conn.-----	51	24	—	1	St. Petersburg, Fla.-----	103	88	5	—
Providence, R. I.-----	58	38	5	—	Tampa, Fla.-----	86	51	11	6
Somerville, Mass.-----	17	12	2	—	Washington, D. C.-----	229	104	7	16
Springfield, Mass.-----	47	29	2	4	Wilmington, Del.-----	50	25	4	2
Waterbury, Conn.-----	38	20	—	2					
Worcester, Mass.-----	57	40	6	3	EAST SOUTH CENTRAL:	749	435	48	34
MIDDLE ATLANTIC:	3,509	2,083	140	143	Birmingham, Ala.-----	89	53	1	6
Albany, N. Y.-----	35	19	—	3	Chattanooga, Tenn.-----	41	27	4	—
Allentown, Pa.-----	34	20	3	1	Knoxville, Tenn.-----	61	42	7	2
Buffalo, N. Y.-----	160	94	4	5	Louisville, Ky.-----	181	105	26	11
Camden, N. J.-----	52	33	1	3	Memphis, Tenn.-----	155	83	3	6
Elizabeth, N. J.-----	33	16	2	3	Mobile, Ala.-----	54	37	2	1
Erie, Pa.-----	35	18	7	4	Montgomery, Ala.-----	38	21	4	3
Jersey City, N. J.-----	63	33	8	2	Nashville, Tenn.-----	130	67	1	5
Newark, N. J.-----	79	38	6	4	WEST SOUTH CENTRAL:	1,276	681	52	71
New York City, N. Y.-----	1,757	1,047	62	71	Austin, Tex.-----	44	20	4	—
Paterson, N. J.-----	39	21	—	3	Baton Rouge, La.-----	52	29	—	4
Philadelphia, Pa.-----	589	335	13	21	Corpus Christi, Tex.-----	27	21	—	2
Pittsburgh, Pa.-----	211	124	14	7	Dallas, Tex.-----	177	95	8	8
Reading, Pa.-----	54	42	—	1	El Paso, Tex.-----	59	25	5	13
Rochester, N. Y.-----	122	80	5	8	Fort Worth, Tex.-----	67	37	3	2
Schenectady, N. Y.-----	27	20	—	—	Houston, Tex.-----	247	120	6	5
Scranton, Pa.-----	43	29	1	—	Little Rock, Ark.-----	59	31	2	3
Syracuse, N. Y.-----	71	47	2	3	New Orleans, La.-----	205	94	9	16
Trenton, N. J.-----	31	21	3	1	Oklahoma City, Okla.-----	68	42	2	3
Utica, N. Y.-----	39	28	6	—	San Antonio, Tex.-----	131	83	1	9
Yonkers, N. Y.-----	35	18	3	3	Shreveport, La.-----	62	37	5	1
EAST NORTH CENTRAL:	2,758	1,567	100	135	Tulsa, Okla.-----	78	47	7	5
Akron, Ohio-----	73	50	—	6	MOUNTAIN:	432	235	18	28
Canton, Ohio-----	41	27	4	3	Albuquerque, N. Mex.-----	56	24	4	3
Chicago, Ill.-----	804	437	36	46	Colorado Springs, Colo.-----	27	16	1	4
Cincinnati, Ohio-----	191	108	3	7	Denver, Colo.-----	102	53	2	7
Cleveland, Ohio-----	213	111	6	8	Ogden, Utah-----	27	17	4	1
Columbus, Ohio-----	120	58	3	6	Phoenix, Ariz.-----	88	39	1	3
Dayton, Ohio-----	73	42	4	4	Pueblo, Colo.-----	15	10	—	1
Detroit, Mich.-----	349	203	7	19	Salt Lake City, Utah-----	47	31	—	2
Evansville, Ind.-----	43	29	3	1	Tucson, Ariz.-----	70	45	6	7
Flint, Mich.-----	41	22	—	1	PACIFIC:	1,774	1,089	36	66
Fort Wayne, Ind.-----	49	29	6	3	Berkeley, Calif.-----	22	11	—	1
Gary, Ind.-----	34	10	3	4	Fresno, Calif.-----	52	31	1	1
Grand Rapids, Mich.-----	52	36	6	3	Glendale, Calif.-----	35	28	—	1
Indianapolis, Ind.-----	173	94	4	12	Honolulu, Hawaii-----	48	19	2	5
Madison, Wis.-----	45	23	4	—	Long Beach, Calif.-----	96	56	3	4
Milwaukee, Wis.-----	137	88	3	—	Los Angeles, Calif.-----	585	375	13	22
Peoria, Ill.-----	33	16	2	2	Oakland, Calif.-----	85	54	1	3
Rockford, Ill.-----	38	26	3	—	Pasadena, Calif.-----	35	26	—	—
South Bend, Ind.-----	41	32	2	—	Portland, Oreg.-----	147	105	5	3
Toledo, Ohio-----	144	88	—	9	Sacramento, Calif.-----	62	31	—	4
Youngstown, Ohio-----	64	38	1	1	San Diego, Calif.-----	98	61	—	6
WEST NORTH CENTRAL:	940	564	33	34	San Francisco, Calif.-----	219	113	9	6
Des Moines, Iowa-----	70	40	1	3	San Jose, Calif.-----	48	27	1	—
Duluth, Minn.-----	29	17	3	—	Seattle, Wash.-----	135	74	—	9
Kansas City, Kans.-----	38	18	2	3	Spokane, Wash.-----	50	43	—	—
Kansas City, Mo.-----	161	99	6	4	Tacoma, Wash.-----	57	35	1	1
Lincoln, Nebr.-----	26	20	—	—					
Minneapolis, Minn.-----	107	72	2	5	Total	13,553	7,838	537	603
Omaha, Nebr.-----	105	62	4	2	Expected Number	12,765	7,401	443	532
St. Louis, Mo.-----	278	162	7	8	Cumulative Total (includes reported corrections for previous weeks)	608,750	347,968	27,204	28,930
St. Paul, Minn.-----	77	48	—	5					
Wichita, Kans.-----	49	26	8	4					
Las Vegas, Nev.*	22	7	2	—					

\*Mortality data are being collected from Las Vegas, Nev., for possible inclusion in this table, however, for statistical reasons, these data will be listed only and not included in the total, expected number, or cumulative total, until 5 years of data are collected.



## MENINGOCOCCAL INFECTIONS

(Continued from page 411)

ing from civilian and military cases were serogroup C strains (Table 1). This is in contrast to previous years when serogroup B was the predominant type.

Sulfadiazine resistance of strains has continued to increase. This overall trend mainly reflects the increasing percentage of serogroup C isolates that were submitted to NCDC from cases of meningococcal disease. The frequency of sulfonamide resistance in serogroup C, in contrast to other serogroups, has increased significantly (Table 1).

Since September 1968, the proportion of isolates submitted from different geographic divisions has corresponded to the proportion of cases reported by these divisions (Table 2) with two exceptions: 59 isolates in EY 1969 were submitted from an army base in the Middle Atlantic Division and no isolates were received from California although the state reported an unusually high incidence of meningococcal disease during 1969 (MMWR, Vol. 18, No. 16). (Reported by the Bacterial Diseases Branch, Epidemiology Program, and the Bacterial Reference Unit and the Bacterial Immunology Unit, Laboratory Division, NCDC.)

\*Since Sept. 1, 1968, data on meningococcal infections have been analyzed at the NCDC on the basis of an epidemiologic year rather than a calendar year. Bacteriologic data prior to September 1968 are not readily available on an epidemiologic year basis and therefore are presented on the basis of the calendar year.

## ERRATUM, Vol. 18, No. 45, p. 400

In the article "Influenza - Summer and Fall 1969," the terms **summer** and **fall**, as used, refer to seasons in the northern hemisphere. This period corresponds to winter and spring in the southern hemisphere; thus influenza activity in Uruguay, Chile, Australia, and New Zealand should be recognized as occurring during their winter and spring months.

## Editor's Note:

In an effort to keep our mailing list current, we are including in the address section of this week's "Morbidity and Mortality Weekly Report" a short statement which may be used to change subscriptions. This statement will reappear periodically.

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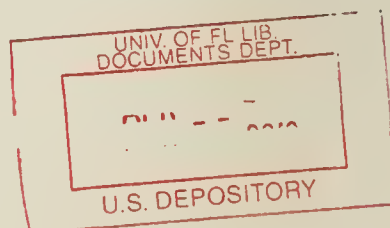
MORBIDITY AND MORTALITY WEEKLY REPORT

ATLANTA, GEORGIA 30333

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